

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV 611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TEXAS 76011-8064

March 31, 2000

Gregg R. Overbeck, Senior Vice President, Nuclear Arizona Public Service Company P.O. Box 52034 Phoenix, Arizona 85072-2034

SUBJECT: PLANT PERI

PLANT PERFORMANCE REVIEW - PALO VERDE NUCLEAR GENERATING

STATION

Dear Mr. Overbeck:

The purpose of this letter is to communicate our assessment of your performance and to inform you of our planned inspections at your facility. On March 2, 2000, we completed a Plant Performance Review (PPR) of Palo Verde Nuclear Generating Station (Palo Verde). We conduct these reviews to develop an integrated overview of the safety performance of each operating nuclear power plant. We use the results of the PPR in planning and allocating inspection resources and as inputs to our senior management meeting (SMM) process. This PPR evaluated inspection results and safety performance information for the period from January 25, 1999, through February 11, 2000, but emphasized the last 6 months to ensure that our assessment reflected your current performance. Our most recent summary of plant performance at Palo Verde was provided to you in a letter dated September 16, 1999.

The NRC has been developing a revised reactor oversight process that will replace our existing inspection and assessment processes, including the PPR, SMM, and Systematic Assessment of Licensee Performance (SALP). We recently completed a pilot program for the revised reactor oversight process at nine participating sites and are making necessary adjustments based on feedback and lessons learned. We are beginning initial implementation of the revised reactor oversight process industry-wide, including your facility, on April 2, 2000.

This PPR reflects continued process improvements as we make the transition into the revised reactor oversight process. You will notice that the following summary of plant performance is organized differently from our previous performance summaries. Instead of characterizing our assessment results by SALP functional area, we are organizing the results into the strategic performance arenas embodied in the revised reactor oversight process. Additionally, in assessing your performance, we have considered the historical performance indicator data that you submitted in January 2000 in conjunction with the inspection results. The results of this PPR were used to establish the inspection plan in accordance with the new risk-informed inspection program (consisting of baseline and supplemental inspections). Although this letter incorporates some terms and concepts associated with the new oversight process, it does not reflect the much broader changes in inspection and assessment that will be evident after we have fully implemented our revised reactor oversight process.

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During the last 6 months, Unit 1 operated at or near full power, with the exception of a plant shutdown for a refueling outage. Unit 2 operated at or near full power, with the exception of an automatic reactor trip as a result of a malfunctioning control element assembly calculator and a plant shutdown to repair extraction steam expansion joints inside the main condenser. Unit 3 operated at or near full power, with the exception of a power reduction to repair a main feedwater pump. Although the NRC identified some performance issues during this assessment period, Palo Verde continues to operate in a safe manner.

Palo Verde's implementation of programs in the reactor safety strategic performance arena demonstrated overall safe plant operations. However, concerns regarding the implementation of the emergency preparedness program were noted. These concerns dealt with your inability to effectively correct past weaknesses. This area of concern will be a focus for baseline inspections conducted during the next assessment period.

We did not identify any significant performance issues in the radiation safety or safeguards strategic performance areas. As a result, only baseline inspections are planned.

Enclosure 1 contains a historical listing of plant issues, referred to as the Plant Issues Matrix (PIM), that were used during this PPR process to arrive at our integrated view of your performance trends. The PIM for this assessment is grouped by the prior SALP functional areas of operations, maintenance, engineering, and plant support, although the future PIM will be organized along the cornerstones of safety as described in the revised reactor oversight process. The attached PIM includes items summarized from inspection reports or other docketed correspondence regarding Palo Verde. We did not document all aspects of licensee programs and performance that may be functioning appropriately. Rather, we only documented issues that we believe warrant management attention or represent noteworthy aspects of performance. In addition, the PPR may also have considered some predecisional and draft material that does not appear in the enclosed PIM, including observations from events and inspections that had occurred since our last inspection report was issued but had not yet received full review and consideration. We will make this material publically available as part of the normal issuance of our inspection reports and other correspondence.

Enclosure 2 lists our planned inspections for the period April 2000 through March 2001 at Palo Verde to allow you to resolve scheduling conflicts and personnel availability in advance of our inspector arrival onsite. The inspection schedule for the latter half of the period is more tentative and may be adjusted in the future due to emerging performance issues at Palo Verde or other Region IV facilities. Routine resident inspections are not listed due to their ongoing and continuous nature.

We will inform you of any changes to the inspection plan. If you have any questions, please contact me at (817) 860-8250.

Sincerely,

P. Harrell, Chief Project Branch D

Division of Reactor Projects

Docket Nos.: 50-528

50-529

50-530

License Nos.: NPF-41

NPF-51 NPF-74

Enclosures:

- 1. Plant Issues Matrix
- 2. Inspection Plan

cc w/enclosures:

Steve Olea

Arizona Corporation Commission 1200 W. Washington Street Phoenix, Arizona 85007

Douglas K. Porter, Senior Counsel Southern California Edison Company Law Department, Generation Resources P.O. Box 800 Rosemead, California 91770

Chairman Maricopa County Board of Supervisors 301 W. Jefferson, 10th Floor

Phoenix, Arizona 85003

Aubrey V. Godwin, Director Arizona Radiation Regulatory Agency 4814 South 40 Street Phoenix, Arizona 85040 Angela K. Krainik, Director Regulatory Affairs Arizona Public Service Company P.O. Box 52034 Phoenix, Arizona 85072-2034

John C. Horne, Vice President, Power Generation El Paso Electric Company 2702 N. Third Street, Suite 3040 Phoenix, Arizona 85004

Terry Bassham, Esq. General Counsel El Paso Electric Company 123 W. Mills El Paso, Texas 79901

John W. Schumann Los Angeles Department of Water & Power Southern California Public Power Authority P.O. Box 51111, Room 1255-C Los Angeles, California 90051-0100

David Summers
Public Service Company of New Mexico
414 Silver SW, #1206
Albuquerque, New Mexico 87102

Jarlath Curran Southern California Edison Company 5000 Pacific Coast Hwy. Bldg. DIN San Clemente, California 92672

Robert Henry Salt River Project 6504 East Thomas Road Scottsdale, Arizona 85251

Harry E. Border Division of Emergency Management State of Arizona 5636 East McDowell Road Phoenix, Arizona 85008 bcc to DCD (IE40)

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Region IV PALO VERDE

| Date | Source | Functional Area | ID | Туре | Template Codes | item Title Item Description |
|---|--------------------------|--------------------|-----|------|-------------------|--|
| 01/14/2000 | 1999018-01 | Pri: OPS | NRC | NCV | Pri: 4C | Failure to follow procedure |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | lo Verde 1 lo Verde 2 | Sec: | | | Sec: Ter: | The licensee's failure to follow the procedure governing design engineering routing design modifications to the nuclear training department for training impact reviews was a Severity Level IV violation. This violation is being treated as a noncited violation (50-528;-529;-530/9918-01), consistent with Section VII.B.1 of the NRC Enforcemental Policy. |
| 01/08/2000 | 1999022 | Pri: OPS | NRC | POS | Pri: 1C | Y2K preparedness |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: Ter: | The licensee was well prepared for the potential adverse events that may have occurred from the rollover to Year 2000. This was demonstrated, in part, by having comprehensive checklists for pre- and post-rollover actions, a person stationed at a similar plant in Korea, and emergency plan staffing and other personnel onsite during the rollover. There was no impact to unit operation or license compliance as a result of the rollover. |
| 01/08/2000 | 1999022 | Pri: OPS | NRC | POS | Pri: 5B | Operations self-assessments |
| Dockets Disc 05000528 Palo 05000529 Palo 05000530 Palo | o Verde 1 o Verde 2 | Sec: | | | Ter: | Self-assessments of operations were critical, as evidenced by the number of issues and recommendations documented in the reports. Also, the scope and depth of the assessments was good. The value of these assessments was demonstrated by management's use of one issue to form a project to address the status control complexity issue. |
| 11/27/1999 | 1999020 | Pri: OPS | NRC | POS | Pri: 5B | Corrective Action Review Board |
| Dockets Discu 05000528 Palo 05000529 Palo | Verde 1 Verde 2 | Sec: | | | Sec: 5C | The Corrective Action Review Board was appropriately staffed with experienced personnel that provided a thorough and critical review of the resolution to significant conditions adverse to quality. |
| 10/16/1999 | 1999019 | Pri: OPS | NRC | POS | Pri: 1A | Performance during Unit 1 plant shutdown |
| | | Sec: | | | Sec: 10: | The Unit 1 reactor shutdown for the eighth refueling outgoing outgoing the |
| Dockets Disc u 05000528 Palo 05000529 Palo 05000530 Palo | Verde 1 Verde 2 | | | | | approved procedures. Supervisory oversight and direction of the operating crew and operator performance during the shutdown were excellent. |

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Region IV PALO VERDE

| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
|---|------------------------|--------------------|----------|---------|-------------------|---|
| 10/16/1999 | 1999019 | Pri: OPS | NRC | POS | Pri: 1A | Operator oversight of Unit 1 draindown to midloop was excellent |
| | | Sec: | | | Sec: 1C | Operator oversight and direction of the evolution to drain Unit 1 to the midloop condition, and decisions to take |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | | | Ter: 3A | | conservative actions during the evolution, were excellent. |
| 10/16/1999 | 1999019-04 | Pri: OPS | Licensee | NCV | Pri: 2B | Failure to properly calibrate NIs |
| | | Sec: | | | Sec: 3A | In Dec. 1998, the licensee identified that incorrect acceptance criteria had been used for the calibration of nuclear |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | | | Ter: | | power channels during power ascension testing on three occasions. Three examples of a violation of TS Surveillance Requirement 4.3.1.1 were identified for not calibrating nuclear power indications to within the acceptance criteria during power ascension testing. These violations were reported in LER 50-528,-529/96-008-00. This severity Level IV violation is being treated as a NCV consistent with Appendix C of the NRC Enforcement policy. These issues are in the licensee's corrective action program as CRDR 9-8-1874. |
| 09/04/1999 | 1999016 | Pri: OPS | NRC | POS | Pri: 1B | Response to MFW Transient |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: Ter: | Unit 3 control room operators appropriately tripped main feedwater Pump B in response to increasing pump vibration. Their response to the resultant automatic reactor power cutback was good. Support from the Systems and Reactor Engineering groups was good. |
| 09/03/1999 | 1999301 | Pri: OPS | NRC | POS | Pri: 3A | All initial operator licensing applicants passed with strong performance observed |
| | | Sec: | | | Sec: | All five applicants for senior operator licenses passed the licensing examinations and were issued the appropriate |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | | | | Ter: | licenses. Strong applicant performance with good communication techniques, peer checking, and crew briefings was observed during the operating test. |
| 09/03/1999 | 1999301 | Pri: OPS | NRC | POS | Pri: 3A | A high quality initial operator licensing exam was submitted to the NRC |
| | | Sec: | | | Sec: | The licensee developed and submitted a high quality examination, which was administrated with only minor change |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | | | | Ter: | |

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| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
|--|--------------------------|--------------------|----------|------|-------------------|---|
| 07/24/1999 | 1999014 | Pri: OPS | NRC | POS | Pri: 1A | Good operator performance during the June 18, 1999 Unit 2 reactor trip |
| Dockets Disc 05000529 Pa | | Sec: | | | Sec: Ter: | Operator performance during the Unit 2 reactor trip caused by failure of Control Element Assembly Calculator 2 wa good. The Management Response Team meeting and subsequent Plant Review Board meeting that authorized restart of the unit covered the required areas with the appropriate emphasis on plant safety. |
| 06/12/1999 | 1999012 | Pri: OPS | NRC | NEG | Pri: 1A | Failure to evaluate TS LCO prior to making a mode change. |
| | | Sec: | | | Sec: 3A | Inattention to details was demonstrated by the operations shift manager when he failed to evaluate a Technical |
| Dockets Discussed: 05000529 Palo Verde 2 | | | | Ter: | | Specification limiting condition for operation prior to making a mode change (Section O1.1). |
| 05/18/1999 | 1999006 | Pri: OPS | NRC | POS | Pri: 1A | Operator oversight and direction of the Unit 2 draindown to midloop evolution were excellent. |
| Dockets Discussed: 05000529 Palo Verde 2 | | Sec: | | | Sec: Ter: | Operator oversight and direction of the Unit 2 draindown to midloop evolution were excellent. Licensee activities related to midloop operation demonstrated a strong safety focus. |
| 05/01/1999 | 1999006-01 | Pri: OPS | NRC | NCV | Pri: 5C | Inadequate corrective action for previously identified surveillance procedure inadequacy |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | lo Verde 1 lo Verde 2 | Sec: | | | Sec: Ter: | The licensee failed to take actions to correct an inadequate procedure that was used to verify the position of valves in the Unit 1 essential chilled water system. This deficiency was again identified during operation of the system for maintenance, which resulted from mispositioned valves in the essential chilled water system. This is a violation of 10 CFR Part 50, Appendix B, Criterion XVI. This Severity Level IV violation is being treated as a noncited violation consistent with Appendix C of the NRC Enforcement Policy. This issue is in the licensee's corrective action program as Condition Report/Disposition Request 9-9-Q0107. |
| 05/01/1999 | 1999006-02 | Pri: OPS | Licensee | NÇV | Pri: 3A | Two examples of failure to bypass parameters as required by TS Section 3.3 |
| Dockets Disc 05000528 Pal 05000529 Pal | lo Verde 1 | Sec: | | | Sec: Ter: | Two examples of a violation of Technical Specification 3.3 were identified for not placing an instrument in the bypass or tripped condition within 1 hour from the time the instrument was identified as inoperable. These events were reported in Licensee Event Reports 50-528/98-001-00, 50-529/98-003-00, and 50-529/98-003-01. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. These issues are in the licensee's corrective action program as Condition Report/Disposition Requests 1-8-0044 and 9-8-0931. |
| 05/01/1999 | 1999006-03 | Pri: OPS | Licensee | NCV | Pri: 3A | Failure to store a spent fuel assembly in the correct spent fuel pool location as required by TS 3.7.17 |
| Dockets Disc 05000529 Pal | | Sec: | | | Sec: Ter: | Personnel error in preparing a material balance transfer sheet form and inadequate independent verification of the form resulted in Assembly P1B241 being stored in an incorrect location in the Unit 2 spent fuel pool since August 1997. This is a violation of Technical Specification 3.7.17. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This issue is in the licensee's corrective action program as Condition Report/Disposition Request 2-9-0048. |

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By Primary Functional Area

| Date | Source | Functional Area | ID | Type | Template Codes | Item Title Item Description |
|---|--|--------------------|----------|---|-------------------|--|
| 03/20/1999 | 1999004 | Pri: OPS | NRC | NEG | Pri: 1B | Operator misdiagnosis of plant conditions results in Unit 1 trip. |
| Dockets Disc 05000528 Pal | | Sec: | | | Sec: Ter: | Misdiagnosis of plant conditions and unnecessarily hurried operator actions in response to a failure in the main turbine electrohydraulic control system caused a Unit 1 reactor trip on high pressurizer pressure. Posttrip operator actions were good. |
| 02/06/1999 | 1998010 | Pri: OPS | NRC | POS | Pri: 1B | Actions taken by the operations staff to mitigate instrument air header leak were effective. |
| | | Sec: | | | Sec: 3A | A failed gasket at a flanged connection caused a substantial leak in the Unit 3 instrument air header. Operator |
| Dockets Disc 05000530 Pal | | | | Ter: | Ter: | actions to isolate the leak, combined with the proper functioning of the backup nitrogen supply, stabilized the instrument air header pressure to allow the unit to remain stable throughout this event. Actions taken by the operations staff to mitigate this event were effective. |
| 02/06/1999 | 1998010 | Pri: OPS | NRC | POS | Pri: 1B | Operator response to the unexpected loss of the Unit 1 120-Vac Bus PND-D28 was good. |
| | | Sec: | | | Sec: 3A | Control room operator response to the unexpected loss of the Unit 1 120-Vac Instrumentation Bus PND-D28 was |
| Dockets Disc 05000528 Pal | | | | | Ter: | good . |
| 01/31/1999 | 1999016-01 | Pri: OPS | Licensee | NCV | Pri: 1C | PDIL Alarm Inoperable Due to Inattentive Operators |
| 01/31/1999 1999016-01 Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: 3A Ter: | A lack of attention to detail and inadequate independent verification by control room operators when entering a point into the plant computer rendered the Unit 2 Power Dependent Insertion Limit alarm inoperable and is a violation of Technical Specification 3.1.7.D. This event was reported in Licensee Event Report 50-529/99-001-00. This Severity Level IV violation is being treated as a noncited violation consistent with Appendix C of the NRC Enforcement Policy. This issue is in the licensee's corrective action program as Condition Report/Disposition Request 2-9-0009. |
| 01/29/1999 | 1999002 | Pri: OPS | NRC | STR | Pri: 1A | Good performance by shift and staff crews in operator requal exams. |
| | | Sec: | | | Sec: 1B | The licensed operators on both shift and staff crews demonstrated strong capability to respond to and mitigate a |
| 05000528 Pa 05000529 Pa 05000530 Pa | lo Verde 1 lo Verde 2 | | | | Ter: 3B | variety of abnormal and emergency conditions to protect the public health and safety. Operators exhibited improved performance in several behavioral skills including communication, self-verification, concurrent or peer verification, and supervisory oversight. |
| 01/29/1999 | 1999002 | Pri: OPS | NRC | STR | Pri: 1C | Good performance by licensed operator requal training organization. |
| | | Sec: | | | Sec: 3B | The operations training organization exhibited a sustained high level of performance in implementing a systems |
| 05000528 Pa 05000529 Pa | Sec: Sec: 3B The operation approach to tr 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Ter: | approach to training for the licensed operator requalification program. | | |

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Region IV PALO VERDE

| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
|---|---|--------------------|----------|-----------------|-------------------|--|
| 11/27/1999 | 1999020-00 | Pri: MAINT | NRC | NCV | Pri: 5C | Failure to promptly correct a condition adverse to quality |
| Dockets Disc 05000528 Pa 05000529 Pa 05000530 Pa | lo Verde 1 lo Verde 2 | 2 | | | Sec: Ter: | Cancellation of a work order implementing the corrective action for a condition adverse to quality resulted in the failure to promptly correct the condition. As a result, both 42-inch containment purge valves in Unit 1 were inoperable for a short time. This is a violation of 10 CFR Part 50, Appendix B, Criterion XVI. This Severity Level IV violation is being treated as a noncited violation, consistent with Section VII.B.1.a of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as CRDR 101502. |
| 10/16/1999 | 1999019 | Pri: MAINT | Licensee | NEG | Pri: 2A | Inadequate PM on control room humidifier |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | Sec: 2B Ter: | | Inadequate preventive maintenance on the humidifier in the Unit 2 control room normal ventilation system caused the humidifier reservoir to overflow into the essential control room filtration unit. This resulted in the Train B essential control room filtration unit becoming inoperable. The licensee's actions to address the issue were appropriate. |
| 10/16/1999 | 1999019 | Pri: MAINT | Licensee | NEG | Pri: 2B | Procedural deficiency |
| 05000528 Pa 05000529 Pa | Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | Sec: Ter: | The licensee identified a procedural deficiency that caused a failure to demonstrate the capability of the remote shutdown control circuit for Essential Air Cooling Unit HAB-Z06 to isolate from the control room during remote shutdown operation. The licensee effectively addressed this issue. |
| 09/04/1999 | 1999016 | Pri: MAINT | NRC | POS | Pri: 2A | Plant Material Condition was Good |
| Dockets Disc 05000528 Pa 05000529 Pa 05000530 Pa | lo Verde 1 lo Verde 2 | Sec: | | | Sec: Ter: | Observable material condition of the three units was good. |
| 09/04/1999 | 1999016 | Pri: MAINT | NRC | POS | Pri: 2B | Effective Implementation of Predictive Maintenance Program |
| Dockets Disc 05000528 Pa 05000529 Pal 05000530 Pa | lo Verde 1 lo Verde 2 | Sec: | | | Sec: Ter: | The licensee effectively implemented a predictive maintenance program to identify and investigate issues to resolution. This was evidenced by the resolution of the predictive maintenance alert status of Unit 2 Emergency Diesel Generator A for the increasing trend of iron and chromium identified in lube oil samples. The licensee's actions represented a good example of an integrated effort to resolve a potentially significant emerging maintenancissue. |

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Region IV PALO VERDE

| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
|---|--------------------------|--------------------|-----|------|-------------------|--|
| 07/30/1999 | 1999022-03 | Pri: MAINT | NRC | NCV | Pri: 2B | Failure to perform test of EGD output breaker |
| Dockets Disc 05000528 Pa 05000529 Pa 05000530 Pa | lo Verde 1 Io Verde 2 | Sec: | | | Sec: Ter: | A violation of Technical Specification Surveillance Requirement 3.8.1.13 was identified for failing to perform a test of the emergency diesel output breaker. This event was reported in Licensee Event Report 50-528; -529; -530/99-002-00. This Severity Level IV violation is being treated as a noncited violation consistent with Section VII.B.1.a of the NRC Enforcement Policy. This issue is in the licensee's corrective action program as Condition Report/Disposition Request 97-0078. |
| 07/24/1999 | 1999014 | Pri: MAINT | NRC | NEG | Pri: 2A | Equipment obsolescence and limited availability of spare parts negatively impacted the licensee |
| Dockets Disc 05000529 Pa | | Sec: | | | Sec: 2B Ter: | Equipment obsolescence and limited availability of spare parts negatively impacted the licensee's efforts to repair the Unit 2 Core Element Assembly Calculator 2 in that it limited the number of parts that were replaced after a failure of indeterminate cause. A subsequent similar failure of Core Element Assembly Calculator 2 resulted in the control room operators removing it from service to prevent another reactor trip. A strategic plan for replacement of this equipment has been developed by the licensee, but no firm milestones have been established. |
| 05/11/1999 | 1999008 | Pri: MAINT | NRC | POS | Pri: 2A | Observable material condition of Unit 2 pumps, valves, piping and component supports was good. |
| Dockets Discussed: 05000529 Palo Verde 2 | | Sec: | | | Sec: Ter: | The external material condition of the observed Unit 2 pumps, valves, piping, and component supports was good, in that, no visible oil or water leaks were noted. The observed equipment was properly identified. |
| 05/11/1999 | 1999008 | Pri: MAINT | NRC | POS | Pri: 3A | NDE procedures were good. |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 lo Verde 2 | Sec: | | | Sec: Ter: | The nondestructive examination procedures used to perform the inspector-observed inservice inspections contained sufficient detail and inspection acceptance criteria to enable the performance of the intended examinations. The procedures were in compliance with Sections V and XI of the ASME Code |
| 05/11/1999 | 1999008 | Pri: MAINT | NRC | POS | Pri: 4C | Licensee personnel were effective in their oversight and control of contractor inservice inspection activities |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: Ter: | Licensee personnel were effective in their oversight and control of contractor inservice inspection activities. Contractor inservice inspection personnel were properly certified and knowledgeable of applicable nondestructive examination procedures and ASME Code requirements. Very good performance was demonstrated by contractor inservice inspection personnel during conduct of equipment calibration and examinations (three-liquid penetrant, four-ultrasonic, and four-magnetic particle) observed by the inspectors. |

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By Primary Functional Area

| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
|--|--------------------------|--------------------|----------|--|-------------------|--|
| 05/11/1999 | 1999008 | Pri: MAINT | NRC | WK | Pri: 4C | The licensee implemented an ISI program which had not been approved by the NRC. |
| | | Sec: | | | Sec: | The licensee's inservice inspection program implemented the 1992 Edition of the ASAE Control of the ASAE C |
| 05000528 Pa 05000529 Pa 05000530 Pa | lo Verde 1 lo Verde 2 | | | | Ter: | approved for use by the NRC. While the licensee determined that they had not deviated from the 1989 Edition of the ASME Code, they did however, identify the need for immediate submittal of two requests for relief that dealt with examination of bolted connections and corrective actions associated with detected leaks of bolted connections. The licensee appeared to have not recognized the differences between the 1980 Edition and Winter 1981 Addenda, the 1989 Edition, and the 1992 Edition and 1992 Addenda. This was considered by the inspectors as a programmatic weakness. |
| 05/11/1999 | 1999008-02 | Pri: MAINT | NRC | NCV | Pri: 2B | Technical Specification 5.4.1 violation for inadequate test procedure |
| 05000528 Pa 05000529 Pa | | | | A noncited violation was identified regarding an inadequate surveillance test procedure. | | |
| 05/01/1999 | 1999006 | Pri: MAINT | Licensee | NEG | Pri: 3A | An improperly written surveillance procedure results in water discharge to the containment sump. |
| Dockets Disc 05000529 Pal | | Sec: | | | Sec: Ter: | Knowledgeable technicians and operators used approved procedures to conduct surveillance activities in a satisfactory manner. However, during Unit 2 integrated safeguards testing of the containment spray actuation signal, operators overlooked a caution note in the procedure providing for the isolation of nuclear cooling water relief valves. The relief valves inadvertently lifted during the test, which resulted in approximately 80 gallons of water being discharged to the containment sump. The caution note contained guidance that should have been included as a procedure sign-off step. Licensee actions to correct the procedure deficiency were acceptable. |
| 05/01/1999 | 1999006 | Pri: MAINT | NRC | POS | Pri: 2A | Observable material condition of the three units was good. |
| | | Sec: | | | Sec: | Observable material condition of the three units was good. During a postsbutdour unallistic and the second |
| 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | | | | Ter: | containment, licensee inspection of Inconel 600 resistance temperature detector nozzles revealed no evidence of leakage. The licensee's actions to address the boron accumulation were good. |
| 04/13/1999 | 1999012-02 | Pri: MAINT | Licensee | NCV | Pri: 1C | Violation of TS 5.4.1 for failure to implement procedures for control of lubricants. |
| Dockets Disc 05000528 Pale 05000529 Pale 05000530 Pale | Verde 1 Verde 2 | Sec: | | | Sec: Ter: | The failure to properly implement procedures for control of lubricants used in the facility is a violation of Technical Specification 5.4.1. The concerns with the control of lubricants included adding the incorrect oil and grease to safety-related components and not ensuring that the requirements of the program were applied to all appropriate personnel within the maintenance department. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. These issues are in the licensee's corrective action program as Condition Report/Disposition Request 9-9-0443. |

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

| Date | Source | Functional Area | ID | Type | Template Codes | Item Title Item Description |
|--|---|--------------------|----------|------|--------------------|---|
| 03/20/1999 | 1999004 | Pri: MAINT | NRC | POS | Pri: 2A | Observable material condition of the three units was good. |
| 05000528 Pa 05000529 Pa | Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | | | Sec: Ter: | Observable material condition of the three units was good. During a posttrip walkdown of the Unit 1 containment, the licensee discovered a moderate amount of boron crystals on carbon steel components of Reactor Coolant Pump 2A. The licensee's actions to address the boron accumulation were good. |
| 03/20/1999 | 1999004-01 | Pri: MAINT | Licensee | NCV | Pri: 3A | Missed 18-month surveillance of trisodium phosphate baskets |
| Dockets Disc 05000529 Pa | | Sec: | | | Sec: Ter: | A violation of Technical Specification 4.5.2.d.3 was identified for the failure to perform the required surveillance test on the trisodium phosphate baskets. This Severity Level IV violation is being treated as a noncited violation per the guidance provided in Appendix C of the Enforcement Policy. This issue is in the licensee's corrective action program as Condition Report/Disposition Request 9-8-Q047. |
| 03/20/1999 | 1999004-02 | Pri: MAINT | Licensee | NCV | Pri: 5B | Failure to correct a deficient condition in the auxiliary feedwater pump governors |
| Dockets Disc 05000528 Pa 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | Sec: | | | Sec: 5C Ter: | The licensee failed to take actions to ensure that a deficient condition was appropriately corrected on all affected components. As a result, the deficiency was not corrected for all turbine-driven auxiliary feedwater pumps in all units. This deficiency was identified again by an overspeed trip of the Unit 2 turbine-driven auxiliary feedwater pump. This is a violation of 10 CFR Part 50, Appendix B, Criterion III. This Severity Level IV violation is being treated as a noncited violation consistent with Appendix C of the NRC Enforcement Policy. The licensee took prompt actions to assess transportibility and correct the conditions. This issue is in the licensee's corrective action program as Condition Report/Disposition Request 2-9-0019. |
| 03/20/1999 | 1999004-03 | Pri: MAINT | Licensee | NCV | Pri: 2A | Failure to provide sufficient instructions for torqueing the EDG air-start header bolts |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | Sec: | | | Sec: 2B Ter: 4C | The licensee failed to provide sufficient design basis information in the appropriate procedures. As a result, missing and/or loose bolts were identified on the Units 1,2, and 3 emergency diesel generator air-start headers. The torque value for the bolts was increased from 25 to 50 foot-pounds, and the bolts that required torqueing were not identified in the appropriate maintenance instructions. This is a violation of 10 CFR Part 50, Appendix B, Criterion III, for not implementing design basis information. This Severity Level IV violation is being treated as a noncited violation consistent with Appendix C of the NRC Enforcement Policy. This issue is in the licensee's corrective action program as Condition Report/Disposition Request 3-9-0026. |
| 03/20/1999 | 1999004-04 | Pri: MAINT | Licensee | NCV | Pri: 2A | Inadequate postmaintenance testing of valve actuators |
| Dockets Disc 05000530 Pal | | Sec: | | | Sec: 2B Ter: 3A | During routine testing of a containment isolation valve for the hydrogen control system, the valve failed to function, as designed. The failure was caused by the valve wiring being improperly installed following maintenance. The condition was not detected by postmaintenance testing because the procedure, which specified the testing requirements for the valve actuators, was inadequate. This is a violation of 10 CFR Part 50 Appendix B, Criterion XI; however, this Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This issue is in the licensee's corrective action plan as Condition Report/Disposition Request 3-9-0010. |

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Region IV PALO VERDE

| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
|---|--------------------------|--------------------|----------|---|-------------------|---|
| 03/20/1999 | 1999004-05 | Pri: MAINT | Licensee | NCV | Pri: 2A | Failure to follow procedure for identification of correct replacement parts |
| | | Sec: | | | Sec: 2B | Inattention to detail led to a failure to follow procedures while retrieving and verifying replacement 480-Vac circuit |
| Dockets Disc 05000528 Pa 05000529 Pa | lo Verde 1 | | | | Ter: 3A | breakers. This resulted in the installation of two nonsafety-related circuit breakers into safety-related motor control center cubicles affecting two high pressure safety injection valves. This is a violation of Technical Specification 5.4.1 for the failure to follow procedures. Postwork reviews also failed to prevent the discrepancies. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement |
| 05000530 Pa | lo Verde 3 | | | | | Policy. This issue is in the licensee's corrective action program as Condition Report/Disposition Request 1-9-0030. |
| 02/06/1999 | 1998010 | Pri: MAINT | NRC | POS | Pri: 2A | During routine tours, the observed material condition of components in all three units was good. |
| | | Sec: | | | Sec: | During routine tours, the observed material condition of components in all three units was good. |
| 05000528 Pa 05000529 Pa 05000530 Pa | lo Verde 1 lo Verde 2 | | | | Ter: | |
| 02/06/1999 | 1998010 | Pri: MAINT | NRC | POS | Pri: 3A | Knowledgeable technicians used approved procedures to perform routine maintenance activities. |
| | | Sec: | | | Sec: 3B | Knowledgeable technicians used approved procedures to perform routine maintenance activities in a safety |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | | | | Ter: | conscious manner. Good work and foreign material control practices were observed. |
| 02/06/1999 | 1998010 | Pri: MAINT | NRC | POS | Pri: 3A | Knowledgeable technicians used approved procedures to conduct surveillance activities. |
| | | Sec: | | | Sec: 3B | Knowledgeable technicians used approved procedures to conduct surveillance activities in a safety-conscious |
| Dockets Disc | cussed: | | | | Ter: | manner. |
| 05000528 Pa | | | | | | |
| 05000529 Pa 05000530 Pa | | | | | | |
| 01/29/1999 | 1999003 | Pri: MAINT | NRC | STR | Pri: 3A | A good ventilation filter testing program was implemented for ESF filtered ventilation systems. |
| | | Sec: | 111.10 | • | Sec: 3B | A good ventilation filter testing program was implemented. The engineered safety feature filtered ventilation |
| Dockets Disc 05000528 Pa 05000529 Pa 05000530 Pa | lo Verde 1 lo Verde 2 | | | | Ter: | systems were routinely tested within the intervals required by technical specifications. Test procedures followed regulatory guidance. Individuals performing in-place filter testing had received related training and were knowledgeable of testing requirements and acceptance criteria. System engineers demonstrated a good knowledge of equipment status and of industry events related to air cleaning systems. |

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Region IV PALO VERDE

| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
|--|--------------------------|--------------------|-----|------|-------------------------|--|
| 12/10/1999 | 1999021-01 | Pri: ENG | NRC | NCV | Pri: 4A | Failure to adequately update the UFSAR. Inconsistency existed between Ch. 8 & 15 and the specific design |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: Ter: | The licensee determined that an inconsistency existed between Chapters 8 and 15 in the Updated Final Safety Analysis Report and the actual plant design. The inconsistency had resulted from a generic Combustion Engineering analysis that was used without necessary revision to account for the site-specific electrical system at Palo Verde. Chapter 15 assumed that 3 seconds of grid (offsite) power would be available to the reactor coolant pumps using the fast bus transfer through the start-up transformer. Chapter 8 and 15 should have identified the specific design of the plant and credited the 3 second (minimum) power pulse from the auxiliary transformer following a turbine trip as the power that was relied upon to supply the reactor coolant pumps. The licensee event report stated that the licensee had missed several opportunities to identify the discrepancy during design change and technical specification amendment reviews. The licensee failed to adequately update the Updated Final Safety Analysis Report to ensure that it was accurate and contained the latest material developed. The failure was identified as a violation of 10 CFR 50.71(e). This Severity Level IV violation is being treated as a noncited violation consistent with Section VII.B.1.a of the NRC Enforcement Policy. The violation is in the licensee's corrective action program as Condition Report/Disposition Request (CRDR) 2-8-0074. |
| 11/27/1999 1999020 Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Pri: ENG Sec: | NRC | POS | Pri: 4B Sec: Ter: | EDG operability assessment was comprehensive The operability assessment to disposition a leaking exhaust manifold on the Unit 1Train B diesel generator was comprehensive. The assessment was based on sound engineering analysis and referenced empirical data to support the conclusions. |
| 09/17/1999 Dockets Disc 05000528 Pa 05000529 Pa 05000530 Pa | lo Verde 1 lo Verde 2 | Pri: ENG Sec: | NRC | POS | Pri: 3A Sec: Ter: | The GL 96-01 review team was thorough in review of industry operating experience. The project plan review team was aggressive in their approach to reviewing industry operating experience, and had performed a thorough and in-depth evaluation of documents in order toidentify issues and determine their applicability to the Palo Verde Nuclear Generating Station. |
| 09/17/1999 Dockets Disc 05000528 Pa 05000529 Pa 05000530 Pa | lo Verde 1 lo Verde 2 | Pri: ENG Sec: | NRC | POS | Pri: 3B Sec: Ter: | Licensee management provided excellent support for accomplishing GL 96-01 objectives. Licensee managment was appropriately responsive to performing the requested actions in Generic Letter 96-01. The project plan was well formulated and the review team members were knowledgeable and well suited for their assigned tasks. |

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05000530 Palo Verde 3

Dockets Discussed:

05000528 Palo Verde 1

05000530 Palo Verde 3

1999017-02

Pri: ENG

Sec:

NRC

NCV

09/03/1999

United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

Region IV PALO VERDE

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|---|--------------------|--------------------|----------|------|-------------------|--|
| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
| 09/04/1999 | 1999016 | Pri: ENG | NRC | POS | Pri: 4B | Actions to Assess Underground Piping Were Good |
| | | Sec: | | | Sec: 5B | The licensee's actions to assess degradation of underground essential spray pond system piping were good. |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | | | Ter: | | |
| 09/03/1999 | 1999017-01 | Pri: ENG | Licensee | NCV | Pri: 4A | Failure to assure Regulatory Guide 1.75 Separation Distances for Battery Cables |
| | | Sec: | | | Sec: | A violation of 10 CFR Part 50, Appendix B, Criterion III, "Design Control," was identified for failure, during initial pla |
| Dockets Dis | Dockets Discussed: | | | | Ter: | design and construction, to apply adequate design controls to ensure that cables associated with the station batteries and the emergency lighting batteries in each unit were separated in accordance with the requirements of |
| 05000528 Palo Verde 1 | | | | | | Regulatory Guide 1.75. This Severity Level IV violation is being treated as a noncited violation, consistent with |
| 05000529 Pa | lo Verde 2 | | | | | Appendix C of the NRC Enforcement Policy. The violation is in the licensee's corrective action program as |
| 05000530 Pa | lo Verde 3 | | | | | Condition Report/Disposition Request 99-100622. |

Pri: 4B

Sec: 5C

Ter:

Failure to promptly correct electrical cable separation problem

A violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," was identified for failure to take

the licensee's corrective action program as Condition Report/Disposition Request 99-100622.

prompt corrective action in response to the licensee's discovery of an electrical cable separation nonconformance

being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. The violation is in

associated with the station and emergency lighting batteries in Units 1 and 3. This Severity Level IV violation is

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

| Date | Source | Functional Area | ID | Type | Template Codes | Item Title Item Description |
|---|--------------------------|--------------------|-----|------|-------------------|---|
| 09/02/1999 | 1999011-01 | Pri: ENG | NRC | NCV | Pri: 4A | Failure to verify the adequacy of design basis calculations and failure to translate the design into procedure: |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: Ter: | The team identified the following four examples of a violation of 10 CFR Part 50, Appendix B, Criterion III, each of which is described below. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Condition Report/Disposition Requests 9-9-1012, 9-9-0763, 9-9-0771, 9-9-0778, and 9-9-0800. None of these examples affected operability. |
| | | | | | | 1. On three occasions, licensee engineers failed to verify and check the adequacy of a design basis change, in that, (1) they revised the maximum refueling water tank temperature in Calculation 13-MC-SI-018, but failed to revise Calculation 13-MC-SI-220, which used the maximum refueling water tank temperature as an input; (2) they revised Calculation 13-MC-SI-018, which superseded portions of Calculation 13-MC-SI-309, but failed to revise Calculation 13-MC-SI-309 to identify the superseded sections; and (3) they revised Calculation 13-MC-SI-018, which established a new minimum containment sump level, but did not revise Calculation 13-MC-SI-804 to reflect that a new minimum containment sump level was established in Calculation 13-MC-SI-018 (Section E1.1). |
| | | | | | | 2. Licensee engineers failed to verify and check the adequacy of Calculation 13-JC-SI-218, in that, the calculation referenced a nonconservative tolerance, and did not consider the specific-gravity for unborated water in the containment spray header. In addition, the licensee failed to verify and check the adequacy of Calculation 13-JC-SI-215, in that, licensee engineers changed the flowrate in one section of Calculation 12-JC-SI-215, but failed to revise all affected sections of the calculation (Section E1.2). |
| | | | | | | 3. Licensee engineers failed to translate the corrected indicated containment spray flowrate from Calculation 12-JC-SI-215 into Emergency Procedure 40EP-9EO03 (Section E1.2). |
| | | | | | | 4. Licensee engineers prepared Modification Package PCWO 00771121, which installed Breaker 3EPKBD2218 and its associated circuit in Unit 3. The modification was canceled, the installed breaker and circuit was abandoned in place, and the breaker was labeled as spare and placed in the "off" position. Most of the affected documents and data bases, which had already been revised to reflect the installed circuit and breaker in use, were not revised to reflect the canceled modification. Licensee engineers (1) failed to verify that Calculation 03-EC-PK-207 adequately reflected installed equipment, and (2) failed to accurately translate design change information from canceled Modification Package PCWO 00771121 (which installed Breaker 3EPKBD2218) into design basis Calculation 03-E-HFB-004, Vendor Drawing E022-24-18, and the plant data management system to show the actual installed configuration |
| 09/02/1999 | 1999011-02 | Pri: ENG | NRC | NCV | Pri: 4A | Failure to ensure that containment sump level transmitters were environmentally qualified for long-term sub- |
| Dockets Disc 05000528 Pa 05000529 Pa 05000530 Pa | lo Verde 1 lo Verde 2 | Sec: | | | Sec: Ter: | The environmental qualification for the containment sump wide range level transmitter Probes J-SIA-LE-0706A and J-SIA-LE-0707A (post-accident monitoring equipment) did not meet the requirements of 10 CFR 50.49 for post-accident monitoring, as described in Regulatory Guide 1.97 for long-term post-accident surveillance of containment sump water level, and committed to in the Updated Final Safety Analysis Report. The team identified this as a noncited violation of 10 CFR 50.49. This violation is in the licensee's corrective action program as Condition Report/Disposition Request 9-9-0730. Subsequent to the team's identification, licensee engineers performed an operability determination and concluded that the level transmitter probes were qualified for long-term submergence. |

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Region IV PALO VERDE

| Date | Source | Functional Area | ID | Type | Template Codes | Item Title Item Description |
|---|------------|--------------------|-----|------|-------------------|---|
| 09/02/1999 | 1999011-03 | Pri: ENG | NRC | NCV | Pri: 4B | Failure to revise the UFSAR to reflect the latest information |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 | | Sec: | | | Sec: Ter: | The team identified the following two examples of a noncited violation of 10 CFR 50.71(e) for failure to ensure that the Updated Final Safety Analysis Report was updated to reflect the latest information available. This violation is in the licensee's corrective action program as Condition Report/Disposition Requests 9-9-0693, 9-9-1055, and 9-9-0956. None of these examples affected operability. |
| 05000530 Pal | lo Verde 3 | | | | | 1. Licensee engineers failed to update the Updated Final Safety Analysis Report to reflect (1) the calibrated range of the refueling water tank level instrument as referenced in Calculation 13-JC-CH-209; (2) the appropriate "LO" refueling water tank level setpoints determined by Calculation 13-JC-CH-206; and (3) the appropriate "LO-LO" refueling water tank level setpoints determined by Calculation 13-MC-CH-201 (Section E1.2). |
| | | | | | | 2. Licensee engineers failed to revise the Updated Final Safety Analysis Report to reflect the actual installed configuration of the battery room exhaust ducts. |
| 09/02/1999 | 1999011-04 | Pri: ENG | NRC | NCV | Pri: 3A | Inaequate procedure and two examples of failure to follow procedures. |
| D - 1 - 4 - D! | | Sec: | | | Sec: 3C | The team identified the following three examples of a noncited violation of 10 CFR Part 50, Appendix B, Criterion V |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 | | | | | Ter: | for an inadequate procedure and failure to follow procedures. This violation is in the licensee's corrective action program as Condition Report/Disposition Requests 9-9-0765, and 9-9-0699. None of these examples affected operability. |
| 05000530 Pal | o Verde 3 | | | | | 1. On three occasions in June 1999, licensee personnel used Operability Determination 183 as justification for not entering technical specification action statements while calibrating hot-leg high pressure safety injection flow transmitters. The team found that Preventive Maintenance Task 038406 (used to calibrate these flow transmitters) was inappropriate to the circumstances. It did not satisfy the conditions in Operability Determination 183, to require technicians in attendance at the transmitter during calibration (Section E2.2.1). |
| | | | | | | 2. Licensee operations personnel failed to make the proper entries in the unit logs, as required by Procedure 40DP-90P26, when they used canceled operability determinations. Specifically, on three occasions in June 1999, operations personnel used canceled Operability Determination 183 to justify calibrating high pressure safety injection flow transmitters on line without entering technical specification action statement (Section E2.2.1). |
| | | | | | | 3. Licensee personnel failed on 10 occasions to conduct and document justification reviews to determine whether safety-related temporary modifications were still necessary or if permanent plant design changes would be initiated. In addition, licensee personnel failed on 11 occasions to distribute the justification review forms, as required by Procedure 81DP-0DC17. |
| 07/24/1999 | 1999014 | Pri: ENG | NRC | POS | Pri: 1C | Thorough engineering evaluation for spray pond freeze protection requirements. |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: Ter: | The engineering evaluation used to determine freeze protection requirements for essential spray pond header risers and spray nozzles was thorough. |

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
|---|---|--------------------|----------|------|-------------------|--|
| 05/11/1999 | 1999008-01 | Pri: ENG | NRC | NCV | Pri: 4A | Failure to maintain adequate drawing design control |
| | | Sec: | | | Sec: | A noncited violation was identified for inadequate design control. |
| 05000528 Pa 05000529 Pa | Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | | | Ter: | |
| 03/20/1999 | 1999004 | Pri: ENG | NRC | POS | Pri: 4B | A Y2K readiness plan had been developed and was being implemented by the licensee. |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: 4C Ter: | A Y2K readiness plan had been developed and was being implemented by the licensee. The plan was organized and contained the necessary elements to address current and potential problems from the Y2K bug. A Y2K contingency plan has been developed, but not finalized. The licensee was well positioned to complete Y2K remediation prior to the end of the year. |
| 03/20/1999 | 1999004-06 | Pri: ENG | Licensee | NCV | Pri: 4A | Failure to conduct an adequate design review of conduit penetrating flooding barriers |
| | | Sec: | | | Sec: | A violation of Criterion III was identified for not specifying the correct type of seal fittings for conduits. As a result, |
| | Dockets Discussed: 05000528 Palo Verde 1 | | | | Ter: | during flooding of a portion of the auxiliary building, water entered the conduits. This affected the operability of safety-related equipment. This Severity Level IV violation is being treated as a noncited violation consistent with Appendix C of the enforcement policy. This issue is in the licensee's corrective action program as Condition Report/Disposition Request 1-60236. |
| 02/06/1999 | 1998010-01 | Pri: ENG | NRC | NCV | Pri: 4B | Failure to establish adequate measures to ensure correct parts are selected for modifications |
| 02/06/1999 1998010-01 Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: Ter: | Several deficiencies in the work control and planning process were identified by the licensee. The combination of poor planning, engineering, technical reviews, verification inspection criteria, and verification specifications were identified. In addition, a lack of periodic monitoring of modification activities and effective planner and worker training were noted. These problem areas resulted in poor work planning in the plant design modification and welding areas. Some personnel involved in the work planning process did not devote the required attention to detail to perform effective planning. Two noncited violations were identified. A violation of Criterion III occurred when a design error resulted in the installation of an improper component, which eventually failed. |
| 02/06/1999 | 1998010-02 | Pri: ENG | NRC | NCV | Pri: 3A | Failure to establish adequate measures to ensure that nondestructive testing is accomplished |
| Dockets Disc 05000528 Pa 05000529 Pa 05000530 Pa | lo Verde 1 lo Verde 2 | Sec: | | | Sec: 3C Ter: | Several deficiencies in the work control and planning process were identified by the licensee. The combination of poor planning, engineering, technical reviews, verification inspection criteria, and verification specifications were identified. In addition, a lack of periodic monitoring of modification activities and effective planner and worker training were noted. These problem areas resulted in poor work planning in the plant design modification and welding areas. Some personnel involved in the work planning process did not devote the required attention to detail to perform effective planning. A violation of Criterion IX occurred when code-required nondestructive examination was not performed on modification welds prior to placing the system in service. This resulted in a train of auxiliary feedwater later being declared inoperable until the examinations were performed and evaluated. |

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| Date | Source | Functional Area | ID | Type | Template Codes | Item Title Item Description |
|--|--------------------------|--------------------|----------|------|--------------------|---|
| 02/06/1999 | 1998010-03 | Pri: ENG | NRC | NCV | Pri: 4A | Failure to maintain design control measures for replacement part commensurate with the original design |
| | | Sec: | | | Sec: 4C | The licensee failed to maintain adequate design control measures when the cooling water line flexible joints for the |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | | | Ter: | | emergency diesel generators were replaced. The replacement joints were not preapproved for use. The appropriate design measures were not taken to verify that the new joints could perform their intended safety function. Failure of these joints would render the diesels inoperable. The licensee promptly responded to address the issue and identified numerous other diesel expansion joint design discrepancies. Upon completion of an evaluation, the licensee determined that the joints would perform satisfactorily and all emergency diesel generators remained operable. This problem is a violation of Criterion III; however, this Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. |
| 01/28/2000 | 2000002 | Pri: PLTSUP | NRC | MISC | Pri: 3B | Exercise weakness identified in simulator walkthroughs for failure to classify emergency condition accurate |
| Dockets Disc 05000528 Pa 05000529 Pa 05000530 Pa | lo Verde 1 Io Verde 2 | Sec: | | | Sec: Ter: | During the simulator walkthroughs, an exercise weakness was identified for failure of one crew to make an accurate declaration of an alert condition based on fission product barrier conditions. The licensee recognized the improper performance, documented it in the corrective action system, and initiated appropriate corrective actions (Section P4 |
| 01/28/2000 | 2000002 | Pri: PLTSUP | Licensee | NEG | Pri: 1B | Management expectations regarding classification verification and protective action recommendation upda |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: 3A Ter: | The management expectation to independently verify emergency classifications was not consistently followed. The management expectation to include previously affected sectors in protective action recommendation updates was not clearly conveyed to the crews. As a result, these activities did not consistently occur between the two crews. The licensee entered the issues into the corrective action system and took appropriate immediate corrective action. Emergency response organization members were being appropriately trained in accordance with emergency plan and implementing procedure requirements. |
| 01/28/2000 | 2000002 | Pri: PLTSUP | NRC | NEG | Pri: 1C | Ineffective procedure maintenance practices at emergency response locations |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: Ter: | The licensee's process for controlling procedures in the emergency response facilities and vehicles was not effective, in that complete and accurate procedure copies for all response positions were not maintained. None of the discrepancies would have significantly affected response capabilities. For example, (1) two field monitoring vehicles did not have all required procedures, (2) procedure indexes used for maintaining procedure binders were not correct for all binders, and (3) two binders were inappropriately located in the technical support center. The licensee initiated a condition report to investigate the discrepancies identified by the inspector and took appropriate immediate corrective action to update the copies. |
| 01/28/2000 | 2000002 | Pri: PLTSUP | Licensee | NEG | Pri: 1C | Ineffective management tool to track emergency preparedness qualifications |
| 01/28/2000 2000002 Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: 3B Ter: 5A | The licensee's recently implemented site-wide management system for tracking emergency responder qualifications was not effective as a management tool to determine actual qualification status. Software problems resulted in an erroneously high number of unqualified responders on generated reports, although the actual number of qualified responders was satisfactory. The licensee identified this problem during a self-assessment and documented it in the corrective action system. The emergency planning department was sufficiently staffed with personnel who had the appropriate diverse backgrounds. |

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Region IV PALO VERDE

| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
|---|-----------|--------------------|----------|------|-------------------|---|
| 01/28/2000 | 2000002 | Pri: PLTSUP | Licensee | NEG | Pri: 5C | Examples of incomplete or ineffective corrective actions identified by licensee and NRC |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: Ter: | There were instances where corrective actions were incomplete or ineffective. The inspector identified some corrective actions for problems associated with emergency classification and emergency response facility ventilation systems that were not complete, resulting in follow-up condition reports. Incomplete or ineffective corrective actions associated with these areas were previously identified in licensee audits. |
| 01/28/2000 | 2000002 | Pri: PLTSUP | NRC | POS | Pri: 5A | Critical and probing Quality Assurance audits of emergency preparedness program |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: | The two Nuclear Assurance Division emergency preparedness audits performed since the last NRC inspection were conducted by personnel with the necessary technical expertise. The audits were thorough and highly critical. The |
| | | | | | Ter: | audits identified a number of significant issues including inadequate problem identification, ineffective corrective actions, and inadequate self-assessments. Both audits met the requirements of NRC regulations, and the appropriate sections were made available to the offsite governmental authorities. The emergency planning department's corrective action program effectively captured problem areas. Root cause determinations were appropriately performed for the most significant problems. |
| 01/14/2000 | 2000001 | Pri: PLTSUP | NRC | STR | Pri: 3A | Excellent ALARA results |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: Ter: | The licensee achieved excellent ALARA results. The 1999 three-year, per-unit, radiation dose total was much lower than recent national averages of pressurized water reactor doses. |
| 01/10/2000 | 2000001 | Pri: PLTSUP | NRC | STR | Pri: 3A | Excellent ALARA results |
| | | Sec: | | | Sec: | The licensee achieved excellent ALARA results. The 1999 three-year, per-unit, radiation dose total was much lower |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | | | | Ter: | than recent national averages of pressurized water reactor doses. The Nuclear Assurance audit was comprehensive and thorough. The audit team was well qualified, and the audit findings were appropriately placed into the licensee's corrective action program. The radiation protection organization identified and resolved problems effectively. |
| 12/10/1999 | 1999021 | Pri: PLTSUP | NRC | STR | Pri: 2B | The dedicated fire department was a strength |
| Dockets Disc 05000528 Pal 05000529 Pal | o Verde 1 | Sec: | | | Sec: Ter: | The fire department was considered a strength to the fire protection program because it's fire team staff was dedicated to fire protection and emergency responsibilities. |

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

| Date | Source | Functional Area | iD | Туре | Template Codes | Item Title Item Description |
|--|------------|--------------------|-----|------|--|--|
| 11/27/1999 | 1999020 | Pri: PLTSUP | NRC | POS | Pri: 1C | Radiation Protection Program was effectively implemented |
| | | Sec: | | | Sec: | The radiological protection program was effectively implemented in those areas reviewed. Licensee efforts to keep |
| Dockets Disc | | | | | Ter: | personnel exposure as-low-as-is-reasonably-achievable during the Unit 1 outage were effective. |
| 05000528 Pale 05000529 Pale | - | | | | | |
| 05000529 Fall | | | | | | |
| 10/16/1999 | 1999019 | Pri: PLTSUP | NRC | POS | Pri: 1C | Radiological controls for diving operations |
| 10/10/1333 | 1000010 | Sec: | NIC | FU3 | Sec: | Good radiological controls and prejob planning resulted in divers in the Unit 1 fuel transfer canal accomplishing |
| Dockets Disc | ussed: | 366. | | | Ter: | repair work on the fuel transfer machine with very low radiation exposure. |
| 05000528 Pale | | | | | 161. | |
| 05000529 Pale | o Verde 2 | | | | | |
| 05000530 Pale | o Verde 3 | | | | | |
| 07/01/1999 | 1999013-01 | Pri: PLTSUP | NRC | NCV | Pri: 2A | Eight security perimeter detection zones defeated by inspectors. |
| | | Sec: | | | violation of Paragraphs 6.3.1 and 6.9.2.2 of the Physical Security Plan, Amendment 43, was identified when eight | |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 | | | | | Ter: | detection zones were defeated by the NRC inspectors and contractors. This Severity Level IV violation is being treated as a noncited violation, consistent with Appendix C of the NRC Enforcement Policy. The violation was placed in the licensee's corrective action program as Condition Report/Disposition Report 990660. |
| 05000530 Pale | o verde 3 | | | | | |
| 06/10/1999 | 1999013 | Pri: PLTSUP | NRC | STR | Pri: 1A | Personnel access to plant protected area effectively controlled. |
| | | Sec: | | | Sec: 3A | Tests of the metal detection and x-ray search equipment, coupled with the performance of the guard force, indicated that the licensee effectively controlled personnel access to the plant protected area. |
| Dockets Disc | | | | | Ter: | that the licensee enectivery controlled personner access to the plant protected area. |
| 05000528 Pale 05000529 Pale | | | | | | |
| 05000529 Pale | | | | | | |
| 00404000 | 4000040 | 8.4. 5. 5. 5. 5. | | | 9 -1-40 | Provident and an article and an article and article article and article article and article article and article article and article article article and article ar |
| 06/10/1999 | 1999013 | Pri: PLTSUP | NRC | STR | Pri: 1C | Excellent performance during two force-on-force exercises. |
| Dockets Disc | | Sec: | | | Sec: 3B | The licensee performed in an excellent manner during two force-on-force exercises. |
| 05000528 Pale | | | | | Ter: | |
| 05000529 Pale | | | | | | |
| 05000530 Pale | o Verde 3 | | | | | |

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Region IV PALO VERDE

| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
|---|------------------------|--------------------|-----|------|--------------------|--|
| 06/10/1999 | 1999013 | Pri: PLTSUP | NRC | STR | Pri: 2A | Responses during security exercises and table top drills were effective. |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: 4A Ter: | The new modular vital area barriers significantly increased the time line for response personnel. The reduction in the number of armed responders assigned to each unit was evaluated during exercises and table top drills. Responses during both the exercises and the table top drills were effective. |
| 05/11/1999 | 1999008 | Pri: PLTSUP | NRC | POS | Pri: 5A | Inservice inspection program self-assessment was thorough, objective and insightful. |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | Sec: | | | Sec: 5B Ter: 5C | The most recent inservice inspection program self-assessment was quite thorough, objective, and insightful. Issues were identified and documented in condition reports/disposition requests, and were being tracked in the licensee's corrective action program. |
| 05/07/1999 | 1999009 | Pri: PLTSUP | NRC | STR | Pri: 1C | Effective implementation of radiological enviromental monitoring and meterological monitoring programs. |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | Sec: | | | Sec: 3B Ter: | Overall, effective radiological environmental monitoring and meteorological monitoring programs were implemented. Implementation of the radiological environmental monitoring program was in accordance with Technical Specifications and the Offsite Dose Calculation Manual. Sample collection, analyses, and associated analyses report forms were conducted in accordance with procedural requirements. Implementation of the meteorological monitoring program agreed with the guidance contained in Regulatory Guide 1.23 and commitments in the Updated Final Safety Analysis Report. Excellent meteorological data recovery in 1998 was noted (99.7 percent). Knowledge and performance of the radiological environmental monitoring and meteorological monitoring programs personnel were outstanding |
| 05/07/1999 | 1999009 | Pri: PLTSUP | NRC | STR | Pri: 5A | Comprehensive audits and evaluations. |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: Ter: | Comprehensive audits and evaluations were performed by well experienced auditors along with outside technical specialists. Audit findings were appropriately placed in the licensee's corrective action process. Corrective actions were generally timely and effective. |
| 05/07/1999 | 1999010 | Pri: PLTSUP | NRC | POS | Pri: 2A | Rad waste facilities materal conditon was good. |
| Dockets Disc 05000528 Pale 05000529 Pale 05000530 Pale | o Verde 1 o Verde 2 | Sec: | | | Sec: Ter: | The material condition within the licensee's waste facilities was good. Tanks and piping in the rooms showed no signs of degradation. There were no indications of resin spillage. |

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Region IV PALO VERDE

| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
|--|--------------------|--------------------|----------|-------------|--|--|
| 05/07/1999 | 1999010 | Pri: PLTSUP | NRC | POS | Pri: 3A | Good program for packaging and shipping radioactive materials and waste. |
| | | Sec: | | | Sec: | The licensee maintained a good program for packaging and shipping radioactive materials and radioactive waste. |
| Dockets Discu | ıssed: | | | | Ter: | |
| 05000528 Palo | | | | | | |
| 05000529 Palo 05000530 Palo | | | | | • | |
| 03000330 Paid | veide 3 | | | | | |
| 05/07/1999 | 1999010 | Pri: PLTSUP | NRC | STR | Pri: 3A | Implementation of a good solid radioactive waste management program. |
| | | Sec: | | | Sec: | The licensee implemented a good solid radioactive waste management program. Radioactive material was |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | | | | Ter: | correctly stored and controlled. Radioactive waste was correctly classified and stabilized for burial. Waste manifests were prepared in accordance with regulatory requirements. |
| 05/07/1999 | 1999010-01 | Pri: PLTSUP | Licensee | NCV | Pri: 3A | Failure to placard a radioactive waste transport vehicle in accordance with 49CFR 172.504 |
| | Sec: | | | | Sec: | The licensee failed to placard a radioactive waste transport vehicle, in violation of 49 CFR 172.504. This Severity |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | | | Ter: | Level IV violation is being treated as a noncited violation. This violation is in the licensee's corrective action program as Condition Report/Disposition Request 99-0287 (Section R1.2). | |
| 04/09/1999 | 1999007 | Pri: PLTSUP | NRC | POS | Pri: 3A | Good radioactive material controls were maintained. |
| | | Sec: | | | Sec: | Good radioactive material controls were maintained. Radiation workers generally used good contamination control |
| Dockets Discu | issed: | | | | Ter: | practices. Radiation protection personnel surveyed items correctly before releasing them from the radiological controlled area. The licensee maintained a sufficient supply of calibrated radiation detection instruments. Radiation |
| 05000528 Palo | | | | | | dose rates and airborne radioactivity concentrations were evaluated correctly. |
| 05000529 Palo 05000530 Palo | | | | | | |
| | veide 3 | | | | | |
| 04/09/1999 | 1999007 | Pri: PLTSUP | NRC | POS | Pri: 3A | The licensee implemented good radiation exposure controls. |
| | | Sec: | | | Sec: | The licensee implemented good radiation exposure controls. Radiation workers were thoroughly instructed in the |
| Dockets Discu | | | | | Ter: | radiation hazards and precautions to reduce radiation dose. The radiation work permit authorization process was not implemented properly, but the licensee addressed the situation promptly. Radiation protection personnel |
| 05000528 Palo | | | | | | provided good support and oversight of radiological controlled area work activities. |
| 05000529 Palo | Verde 2 Verde 3 | | | | | |

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

Region IV PALO VERDE

| Date | Source | Functional Area | ID | Type | Template Codes | Item Title Item Description |
|---|------------------------|--------------------|-----|------|-------------------|---|
| 04/09/1999 | 1999007 | Pri: PLTSUP | NRC | POS | Pri: 3A | Outage preparations demonstrated strong support for ALARA. |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: 3C Ter: | The licensee's preparations for the outage demonstrated strong support for the ALARA concept. Radiological work packages included dose saving measures. Chemistry controls, temporary shielding, and hot spot flushing reduced dose rates in work areas. The licensee established a challenging ALARA goal for Unit 2 Refueling Outage 8. |
| 03/26/1999 | 1999005 | Pri: PLTSUP | NRC | STR | Pri: 1C | Excellent security procedures. |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | Sec: | | | Sec: 2B Ter: | The security procedures were excellent in that they were well written and comprehensive and provided performance-based instruction for the security organization. |
| 03/26/1999 | 1999005 | Pri: PLTSUP | NRC | STR | Pri: 1C | A very good security event reporting program. |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: 3A Ter: | A very good security event reporting program was in place. The security staff was correctly reporting security events. The security field reports were accurate and well written. |
| 03/26/1999 | 1999005 | Pri: PLTSUP | NRC | STR | Pri: 1C | Excellent implementation of security compensatory measures. |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: 3B Ter: | Compensatory measures were implemented in an excellent manner. The security officers were well trained on the program requirements. |
| 03/26/1999 | 1999005 | Pri: PLTSUP | NRC | STR | Pri: 1C | Training and qualification for security officers program was excellent. |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | Sec: | | | Sec: 3B Ter: | The licensee training program exceeded the training and qualification plan requirements. The security officers demonstrated a thorough knowledge of program requirements. Instructors observed during the inspection were very proficient. The training and qualification program was excellent. |

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

| Ву | Primary | Functional | Area |
|----|----------------|-------------------|------|
|----|----------------|-------------------|------|

| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
|---|-------------------------|--------------------|-------|------|-------------------|---|
| 03/26/1999 | 1999005 | Pri: PLTSUP | NRC | STR | Pri: 3A | Well trained and capable security organization. |
| | | Sec: | | | Sec: 3B | The licensee had a well trained and capable security organization. |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | | | | Ter: | |
| 03/26/1999 | 1999005 | Pri: PLTSUP | NRC | STR | Pri: 3A | Implementation of security program by well qualified and highly professional staff. |
| | | Sec: | 11110 | OIII | Sec: 3B | The security program was implemented by a well qualified and highly professional staff. |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | | | | Ter: 3C | |
| 03/11/1999 | 1999001 | Pri: PLTSUP | NRC | NEG | Pri: 1A | Control room simulator staff performance was satisfactory during emergency plan drill. |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | Sec: | | | Sec: Ter: | Control room simulator staff performance was satisfactory. Analysis of plant conditions was acceptable; however, command and control and conduct of operations were not always effective. Three-leg communications were not used in some instances, and communications concerning plant status were delayed on some occasions. |
| 03/11/1999 | 1999001 | Pri: PLTSUP | NRC | POS | Pri: 1C | Emergency preparedness exercise performance was good. |
| | | Sec: | | | Sec: 1B | Overall exercise performance was good. The control room, satellite technical support center, technical support |
| Dockets Disc 05000528 Pal 05000529 Pal 05000530 Pal | o Verde 1 o Verde 2 | | | | Ter: 3B | center, operations support center, and emergency operations facility successfully implemented key emergency pla requirements including emergency classifications, off-site notification, off-hours emergency response facility activation, emergency worker protection, dose assessment, and protective action recommendations. |
| 03/11/1999 | 1999001 | Pri: PLTSUP | NRC | POS | Pri: 5A | Effective emergency preparedness critique process. |
| | | Sec: | | | Sec: | The overall critique process was effective in identifying issues in need of corrective action and areas for |
| 05000528 Pai 05000529 Pai 05000530 Pai | o Verde 1 lo Verde 2 | | | | Ter: | improvement. The post-exercise facility critiques were conducted systematically and identified many issues with facility operations and the scenario. The management critique was thorough and self-critical. |

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

| Date | Source | Functional Area | ID | Туре | Template Codes | Item Title Item Description |
|---|--------------------------|--------------------|-----|------|--------------------|---|
| 03/11/1999 | 1999001-01 | Pri: PLTSUP | NRC | IFI | Pri: 1C | Emergency plan exercise weakness-failure to set facility priorities. |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: 5B Ter: | An exercise weakness was identified in the technical support center for failure to establish and communicate facility priorities to the operations support center to ensure that mitigation efforts were properly accomplished. The engineering group was the only functional area that clearly established priorities. There was no integration between functional area directors to develop overall facility priorities. As a result: (1) a post-earthquake recovery plan was developed by the engineering group without input from other functional areas, (2) field activities which involved multiple disciplines were not well coordinated, and (3) the operations support center was given multiple directions. This exercise weakness was entered into the licensee's corrective action program as Item 99-0283; therefore, no response is requested. |
| 01/29/1999 | 1999003 | Pri: PLTSUP | NRC | STR | Pri: 3A | The licensee implemented a good radioactive effluent management program. |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: 3B Ter: | The licensee implemented a good radioactive effluent management program. The licensee's radioactive effluent sampling, analysis, and dose projection program met the requirements of the Offsite Dose Calculation Manual. Releases of radioactive effluents were within regulatory requirements and did not exceed the commitments within the Final Safety Analysis Report. The licensee calibrated the effluent monitors correctly and maintained them well, particularly in view of the lack of manufacturer's support. Chemistry technicians who prepared radioactive effluent release permits were qualified in accordance to procedural requirements and regulatory guidance. |
| 01/29/1999 | 1999003 | Pri: PLTSUP | NRC | STR | Pri: 5A | The licensee provided good oversight of the radioactive effluent monitoring program. |
| Dockets Discussed: 05000528 Palo Verde 1 05000529 Palo Verde 2 05000530 Palo Verde 3 | | Sec: | | | Sec: 5B Ter: 5C | The licensee provided good oversight of the radioactive effluent monitoring program. Nuclear assurance division audits were comprehensive, and the audit team had the proper technical expertise to provide insightful observations. The self-assessment of radiation monitoring activities demonstrated the licensee's ability to be self-critical and to identify areas in need of improvement. |
| 01/14/2000 | 1999018 | Pri: OTHER | NRC | POS | Pri: 1C | Corrective Action Program |
| | | Sec: | | | Sec: 5A | The team concluded that the licensee had an acceptable corrective action program with several good attributes and |
| O5000529 Pa 05000530 Pa | lo Verde 1 lo Verde 2 | | | | Ter: 5B | characteristics. The licensee's staff was aggressive and highly self-critical in identifying adverse problems and implementing action plans to correct problems. The licensees corrective action processes provided adequate guidance for identifying, classifying, and prioritizing adverse conditions. Licensee personnel were willing to initiate Condition Reports/Disposition Requests for adverse or questionable conditions. |

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United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

Legend

Type Codes:

| | Type C | oues. |
|---|--------|----------------------------------|
| | BU | Bulletin |
| | CDR | Construction |
| | DEV | Deviation |
| | EEI | Escalated Enforcement Item |
| | IFI | Inspector follow-up item |
| | LER | Licensee Event Report |
| | LIC | Licensing Issue |
| | MISC | Miscellaneous |
| Ì | MV | Minor Violation |
| | NCV | NonCited Violation |
| | NEG | Negative |
| | NOED | Notice of Enforcement Discretion |
| | NON | Notice of Non-Conformance |
| | OTHR | Other |
| | P21 | Part 21 |
| | POS | Positive |
| | SGI | Safeguard Event Report |
| | STR | Strength |
| | URI | Unresolved item |
| | VIO | Violation |
| | WK | Weakness |

Template Codes:

| | 1A | Normal Operations |
|---|----|------------------------------|
| | 1B | Operations During Transients |
| | 1C | Programs and Processes |
| | 2A | Equipment Condition |
| | 2B | Programs and Processes |
| | 3A | Work Performance |
| | 3B | KSA |
| | 3C | Work Environment |
| | 4A | Design |
| | 4B | Engineering Support |
| | 4C | Programs and Processes |
| į | 5A | Identification |
| | 5B | Analysis |
| | 5C | Resolution |
| | | |

ID Codes:

| NRC | NRC |
|----------|---------------|
| Self | Self-Revealed |
| Licensee | Licensee |

Functional Areas:

| unociona | nicus. | |
|----------|---------------|--|
| OPS | Operations | |
| MAINT | Maintenance | |
| ENG | Engineering | |
| PLTSUP | Plant Support | |
| OTHER | Other | |
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EEIs are apparent violations of NRC Requirements that are being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action" (Enforcement Policy), NUREG-1600. However, the NRC has not reached its final enforcement decision on the issues identified by the EEIs and the PIM entries may be modified when the final decisions are made.

URIs are unresolved items about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation. A URI may also be a potential violation that is not likely to be considered for escalated enforcement action. However, the NRC has not reached its final conclusions on the issues, and the PIM entries may be modified when the final conclusions are made.

03/30/2000 16:23:44

PALO VERDE

Inspection / Activity Plan 04/02/2000 - 03/31/2001

| Hoite | Inspection Activity Title | N | lo. of Staff on Site | No. assigned to Procedure | Planned Start | Dates End | Inspection Type |
|---------|--|-----------------------|-------------------------|---------------------------|------------------|--------------|----------------------|
| Units | | | | | 7.6.1 | | .,,,,, |
| 4.0.0 | PBD9 - ADVERSE WEATHER PREPS | | 6 | 3 | 04/02/2000 | 05/20/2000 | Baseline Inspections |
| 1, 2, 3 | IP 7111101 Adverse Weather Protection | | 3 | 3 | 04/02/2000 | 03/20/2000 | Baseline Inspections |
| 4 | PBD27 - DRILL EVALUATION IP 7111406 Drill Evaluation | | 3 | 3 | 04/02/2000 | 07/01/2000 | Baseline Inspections |
| 1 | IP 7111406 Drill Evaluation PBD26 - TEMPORARY PLANT MODIFICATIONS | | 3 | 3 | 04/02/2000 | 07/01/2000 | baseline inspections |
| 1 0 0 | | | J | 3 | 04/02/2000 | 03/31/2001 | Baseline Inspections |
| 1, 2, 3 | IP 7111123 Temporary Plant Modifications PBD-TI - TI-144, PI DATA REVIEW | | 1 | 3 | 04/02/2000 | 00/01/2001 | baseline inspections |
| 100 | IP 2515/144 Performance Indicator Data Collecting and Reporting Process | s Review | • | 1 | 05/14/2000 | 08/05/2000 | Safety Issues |
| 1, 2, 3 | EMB - BAGMAN TRIP FOR 71111.05 - FIRE PROT | 13 1 1041044 | 1 | ' | 03/14/2000 | 00/05/2000 | Oalety Issues |
| 1, 2, 3 | IP 7111105Q Fire Protection | | • | 1 | 05/30/2000 | 06/01/2000 | Baseline Inspections |
| 1, 2, 3 | EMB - FIRE PROTECTION | | 6 | • | 00/00/2000 | 00/01/2000 | Dasonile mapeenons |
| 1, 2, 3 | IP 7111105T Fire Protection | | - | 4 | 06/12/2000 | 06/16/2000 | Baseline Inspections |
| 1, 2, 0 | PBD29 - DRILL EVALUATION | | 3 | • | | | |
| 2 | IP 7111406 Drill Evaluation | | | 3 | 07/02/2000 | 09/30/2000 | Baseline Inspections |
| _ | PBD11 - EQUIPMENT ALIGNMENTS-SEMIANNUAL | | 6 | | | | |
| 1 | IP 7111104 Equipment Alignment | | | 3 | 07/09/2000 | 08/26/2000 | Baseline Inspections |
| | PSB-RP1 - ALARA PLANNING/CONTROL 1 | | 1 | | | | • |
| 1, 2, 3 | IP 7112102 ALARA Planning and Controls | | | 1 | 07/17/2000 | 07/21/2000 | Baseline Inspections |
| , , . | OB-RQ - REQUAL INSP | | 2 | | | | • |
| 1, 2, 3 | IP 7111111B Licensed Operator Requalification | | | 2 | 08/14/2000 | 08/18/2000 | Baseline Inspections |
| | EMB - PERM PLANT MODS | | 2 | | | | |
| 1, 2, 3 | IP 7111117B Permanent Plant Modifications | | | 2 | 08/28/2000 | 09/01/2000 | Baseline Inspections |
| | PBD10 - ADVERSE WEATHER PREPS | | 6 | | | | |
| 1, 2, 3 | IP 7111101 Adverse Weather Protection | | | 3 | 10/01/2000 | 11/18/2000 | Baseline Inspections |
| | PBD30 - DRILL EVALUATION | | 3 | | | | |
| 3 | IP 7111406 Drill Evaluation | | | 3 | 10/01/2000 | 12/30/2000 | Baseline Inspections |
| | EMB - ISI | | 1 | | | | |
| 1, 2, 3 | IP 7111108 Inservice Inspection Activities | | | 1 | 10/16/2000 | 10/20/2000 | Baseline Inspections |
| | PSB-S1 - ACCESS AUTH/CONTROL, SEC PLAN, AND PIV | | 1 | | | | |
| 1, 2, 3 | IP 7113001 Access Authorization Program (Behavior Observation Only) | | | 1 | 10/23/2000 | 10/27/2000 | Baseline Inspections |
| 1, 2, 3 | IP 7113002 Access Control (Search of Personnel, Packages, and Vehicle | es: Identification ar | | 1 | 10/23/2000 | 10/27/2000 | |
| 1, 2, 3 | IP 7113004 Security Plan Changes | | | 1 | 10/23/2000 | 10/27/2000 | Baseline Inspections |
| 1, 2, 3 | IP 71151 Performance Indicator Verification | | | 1 | 10/23/2000 | 10/27/2000 | Baseline Inspections |
| | EMB - SAFETY SYS DESIGN & PERF CAPABILITY | | 6 | | | | |
| 1, 2, 3 | IP 7111121 Safety System Design and Performance Capability | | | 4 | | | Baseline Inspections |
| 1, 2, 3 | IP 7111121 Safety System Design and Performance Capability | | | 4 | 12/04/2000 | 12/08/2000 | Baseline Inspections |
| | This report does not include INPO and OUTAGE activities. This report shows only on-site and announced inspection procedures. | | | | | | |

PALO VERDE

Inspection / Activity Plan

04/02/2000 - 03/31/2001

| Units | Inspection Activity | Title | No. of Staff on Site | No. assigned to Procedure | Planned Start | d Dates End | Inspection Type |
|---------|---------------------|--|----------------------|---------------------------|------------------|----------------|----------------------|
| | PBD12 - EQUI | PMENT ALIGNMENTS-SEMIANNUAL | 6 | | | | |
| 2 | IP 7111104 | Equipment Alignment | | 3 | 01/07/2001 | 02/24/2001 | Baseline Inspections |
| | PSB-RP2 - RAD | MONITORING INSTR | 1 | | | 02.2 200 i | Dadeline mapections |
| 1, 2, 3 | IP 7112103 | Radiation Monitoring Instrumentation | | 1 | 01/08/2001 | 01/12/2001 | Baseline Inspections |
| | OB-PIR - PIR IN | NSPECT | 5 | | | 022001 | Dascinio mapections |
| 1, 2, 3 | IP 71152 | Identification and Resolution of Problems | | 3 | 01/22/2001 | 01/26/2001 | Baseline Inspections |
| | PSB-RP3 - ACCE | SS TO RAD SIGN AREAS AND PIV | 1 | | | - 1/20/2001 | Eddomile mapections |
| 1, 2, 3 | IP 7112101 | Access Control to Radiologically Significant Areas | | 1 | 01/29/2001 | 02/02/2001 | Baseline Inspections |
| 1, 2, 3 | IP 71151 | Performance Indicator Verification | | 1 | 01/29/2001 | 02/02/2001 | Baseline Inspections |
| | PSB-RP4 - ALAR | A PLANNING/CONTROL 2 | 1 | | | 02.02.2001 | Dascinie Hispections |
| 1, 2, 3 | IP 7112102 | ALARA Planning and Controls | | 1 | 01/29/2001 | 02/02/2001 | Baseline Inspections |
| | EMB - CHAN | IGES & HEAT SINK PERF | 2 | | | | Passine inspections |
| 1, 2, 3 | IP 7111102 | Evaluation of Changes, Tests, or Experiments | | 2 | 03/05/2001 | 03/09/2001 | Baseline Inspections |
| 1, 2, 3 | IP 7111107A | Heat Sink Performance | | 2 | 03/05/2001 | 03/09/2001 | Baseline Inspections |
| | PSB-EP1 - DRILL | JEXERCISE PERF, EAL/EP, AND PIV | 2 | | | | Dasonie inspections |
| 1, 2, 3 | IP 7111401 | Exercise Evaluation | | 2 | 03/12/2001 | 03/16/2001 | Baseline Inspections |
| 1, 2, 3 | IP 7111404 | Emergency Action Level and Emergency Plan Changes | | 2 | 03/12/2001 | | Baseline Inspections |
| 1, 2, 3 | IP 71151 | Performance Indicator Verification | | 2 | 03/12/2001 | | Baseline Inspections |
| | | | | | | 00/10/2001 | paseine inspections |